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Atari JOURNAL

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THE ATARI MICROCOMPUTER USER

September, 1987

e II, Number 7

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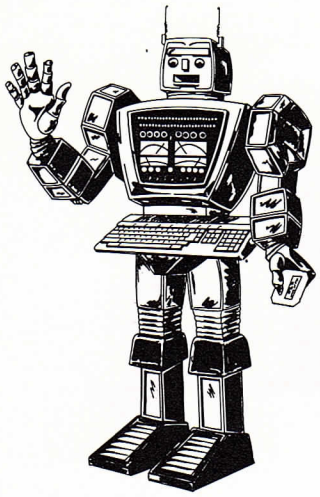

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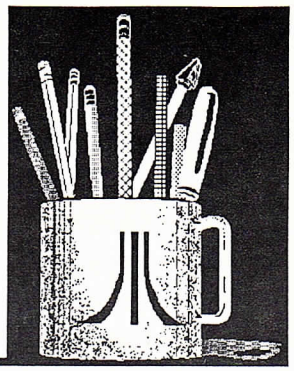
From the Editor's Desk



Yap, Yap, Yap...

That's the sound made by a puppy, chasing after a bigger dog's heels, and it's frequently the way I feel that most of we Atari users are seen by the Atari Corporation. We do tend, honestly, to badger and grouse about the most insignificant items sometimes, and still, these noises are necessary, I think, for the health of our favorite machine. Last issue, I complained about Atari's "no-show" at COMDEX, and several of you called or wrote to indicate strong agreement with my complaint. This month, things look even worse, for as I write this, I continue to learn more of the inner workings of Atari Corp., and their apparent disdain for the "real" world out here. They have yet to choose a direction on any number of important items, ranging from how they intend to market their machines, all the way down to the GDOS/PostScript choice and whether the PC clone is ever to even be manufactured! These are topics that were *supposed* to be resolved months ago, and indeed, would be ancient history by now, in most businesses! I find myself having serious doubts, given these indecisions, as to the longevity of Atari Corp., in spite of its previous "rise from the ashes"...

On another, happier note, I trust that you have, by now, made note of a few changes around here with this issue. We've expanded (again!) by 33%, as well as newer, coated paper stock, and a bit o' color for the cover. This is a great pleasure for me, as I continue to publish this entire magazine from my "lowly" Atari 520ST, and QMS PS 800+ laser printer. I did have to cut my own (!) Desktop Publisher column this month, for lack of space, also a pleasant note! I promise that it'll be back next issue, and we'll then cover more of the trials and tribulations of this issue!

We have a theme this time, which is one of those things that the "big guys" try to do, but it's a bit tough for us, usually. At any rate, with the introduction, recently, of "PC-DITTO", as well as the continued refinement of "The MAGIC SAC", the previously-done CP/M emulation, and the upcoming release of the 8-bit emulator, OS-9, and several renditions of Unix, it seemed time to cover this segment of computing with the Atari ST line of computers.

As always, many thanks to those writers, advertisers, artists, and general supporters of this magazine, since we would still be running Xerox copies of 2 pages, if it weren't for you! Enjoy the issue, and THANKS!

Seeya!
[Jack]

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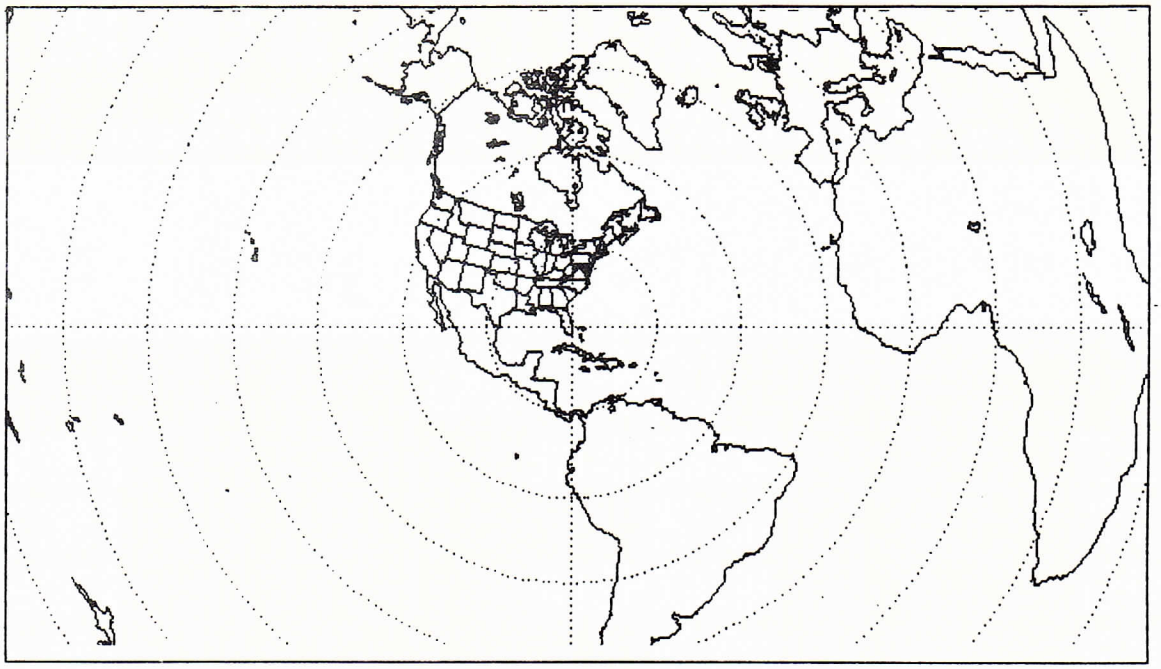

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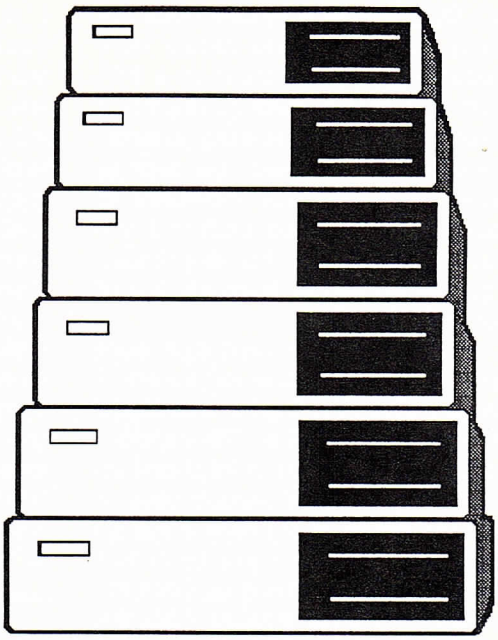
pc_ditto

or...NOW, let's run some IBM software...!



by Steve Zingman

ST owners have some of the best software for a personal computer that I've seen in a long time. Some ST users however, look at the existing IBM PC and wish that they too, could run Lotus 123, SideKick, Turbo Pascal and some of the other very good software packages... Well now you can... More or less.

Pc-ditto is a software-only product from Avant Garde Systems, of Jacksonville, Florida, that will turn your ST hardware into a IBM PC/XT clone, or at least make it act like one. The IBM PC line is based on the Intel 8088, 8086, and 80286. Not bad processors for a single-user machine but nowhere near as nice as the Motorola MC68000, as found in the Atari ST. The PC is limited to a maximum (well, for our purposes, anyway!) of 640k of memory, 80 column color or monochrome screen, detached keyboard, floppy and hard disk drives, parallel (printer) port and serial (RS-232) port, and operates under its own version (PC-DOS) of a Microsoft product, MS-DOS.

Pc-ditto will allow the user to change a standard ST, so that it behaves as if it were an IBM XT, and thereby allows you to run virtually ALL of the popular software packages available for the IBM. The list of Certified Software that came with the original copy of pc-ditto is impressive, and continues to grow by leaps and bounds, as users try, and verify, other programs. I don't use, nor own all of the programs listed, but after a couple of weeks of testing, I can believe that there should be no problem with almost anything you would want to run.

Pc-ditto is a very well designed software emulator for the St, working at the chip level. This means that when a particular piece of software is loading, it "looks" at the hardware, and believes that it's seeing an Intel 80286 chip set, according to the Norton Utilities disk. This is one of the best ways to perform emulation, but with any attempt to emulate one micro-processor on another, you give up something. In some products this is compatablity, but pc-ditto doesn't have this problem; rather in this instance, the thing you give up is speed. Again, according to Norton Utilities (this is a *must* program for most serious workers!) ditto runs at a rating of 0.3, when compared to a 4.77 Mhz XT. That's 30 percent of the speed, folks. While not exactly what you might call "blazingly fast", it's not too important with most of the application software, but it does make most games (gasp! Games? On the IBM?) unusable. This is one area that the program's author, Bill Teal, has indicated will be confronted in future renditions.

I believe that one of the best uses for ditto is likely to be those instances where you have a PC at the office, and you need to do some work at home. Why buy another PC, when you can do the same thing on your ST at much less than the cost of even the cheapest clone? If you are considering this program now as a "must-have", then you should be prepared for its present slow rate of operation, but knowing that the likelihood of its working in your application is quite good. On the other hand, if you're simply considering it for the "novelty", I would suggest that you consider a slower, more cautious approach, at present.

To use ditto you will also need to buy a copy of the MS-DOS operating system. I highly recommend you get IBM's version called PC-DOS (as opposed to "MS-DOS"). I have built a lot of clone systems in my work, and find

(continued...)

pc_ditto (continued...)

PC-DOS will help to turn even the most incompatable clone into something much closer to a PC. With the introduction of the PS/2 from IBM, the operating system, version 3.2 and later, (as well as most of the newer releases of software) comes on both a 5 1/4 and 3 1/2 inch disk. For this review I decided to try the latest version of the O/S, Ver 3.3.

Since I have a hard disk here (the subject of later columns), I decided to go for broke, and install ditto on the hard disk. Thankfully, no copy protection is imposed on pc-ditto, so I could simply copy it into the folder of my choice and go to town! I won't get into the requirement for setting up ditto for booting PC-DOS directly from the hard disk, but suffice it to say it looks and works just like a hard disk on the PC. It's also possible to arrange your pc-ditto master disk with PC-DOS, and one of the GEMSTART, or similar programs, so as to have a fully-automated boot disk, requiring only that you enter the date and time, just as with a "normal" PC clone! Speaking of setting the date and time, while ditto doesn't presently read the ST's internal clock, it is understood that Bill intends to support that in the near future!

Pc-ditto will support PC software written for either the color or mono PC screens -- and this is something even some of the *real* PC's have trouble with. Make note, however, that the present version **ONLY RUNS ON A COLOR ST.** While the packaging is quite clear on this, I thought, it seems that many people, in their rush, have failed to take note of it! If you have a monochrome monitor, and no color, then you'll have to wait for the next revision, due in September. Such revision, by the way, will be at *NO CHARGE TO REGISTERED OWNERS*!

After loading PC-DOS, you are greeted with the standard time and date prompt, and IBM sign on ("A>"). You are now ready to backup your PC-DOS disk, and start running software for the PC. Ah, but now the problem...Most PC software is distributed on 5 1/4 inch disks and transferring them into the 3 1/2" format can prove challenging if you don't happen to have access to a 3 1/2" drive! There *are* schemes to connect a 5 1/4" disk drive to the ST, available either as home brew or you may choose to purchase one from a recommended vendor. Thanks to the PS/2 many IBM vendors are supporting both formats, so check with your software supplier for availability of either 3 1/2 format or transfer from 5 1/4.

"...you should be prepared for its present slow rate of operation..."

A comment about using PC software on more than one machine. Most license agreements state the software is for use on one machine at a time. This isn't a problem if you are bringing home work from the office, BUT... If your'e using 2 machines at once, PLEASE purchase a second copy for home! Commercial software programmers don't make as much money as you might think, and are certainly deserving of their royalities! This is a small price to pay for the enjoyment and use you get out of these or any computer.

Pc-ditto is not without its bugs, but as the old saying goes, "any program over 50 lines (or was it 5?) of code must have a bug." Certain programs seem to have a few problems as yet, and there are some reported problems with floppy disk formats but these should be fixed by the time you read this. All in all, ditto does everything it says it does, and appears to do it very well.

I've been using pc-ditto every night here at home, to finish work from the office, and transmit the completed work back to our network of PC's for printing the next day. It will load and run Dataflex, which I sell and install, but its speed is still below what most users would deem as acceptable.

One major program, WordPerfect 4.2 appears to have some difficulties, such as locking up, if more than 80 continuous characters are entered, requiring hyphenation. Bill is presently looking into this one. AutoCAD appears to load and run, although with such a graphics-intensive program, you're likely to end up old and grey! As an example, the well-known "Nozzle" drawing required approximately 12 minutes to load on a 640K EGA Leading Edge clone, while on the ST, running under pc-ditto, it required 40 minutes! Not for those "rush jobs" just yet! (Notice though, that it *did* load it, and in all fairness, there may have been a few additional changes in the original configuration, that would have caused to to move somewhat faster.

These are the tradeoffs that you should be prepared to make, at present. However, given the remarkable job that Bill, and his partner (and wife!) Ginny, have done on this first rendition, I have faith that if it *can* be done, it will!

In conclusion, pc-ditto is well-written, appears very compatable, and is a boon to the ST community. It should take its place next to Magic Sac, Flash, CAD 3D and other top-notch programs for the ST.

Steve Zingman is Vice-President of Operations for C F I, a distributor for local-area-networks and multiuser software.

Review:

LOGiSTik

Spreadsheet & Time Management

Junior and Senior Versions

Suggested List:
Junior Version - $ 99.95
Senior Version - $ 149.95

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by David Leinecker

Logistik Jr., v. 1.1

LOGiSTik is a "spreadsheet", and before explaining how well this package works, I feel it necessary to explain, briefly, just what a spreadsheet is. Visually, a spreadsheet is a chart on the computer into which numerical values are placed. and then these values are organized into columns and rows. A very common use for spreadsheets is to manipulate financial figures to perform calculations. For example, the financial expenses for a company can be added up by type of expense, by daily expenses, by yearly expenses, by total expense for a company to date, etc.

Spreadsheets are very convenient because they allow a person to manipulate the numerical data in any way he or she sees fit -- even in ways not thought of before the data was entered. For example, if a database of people who have said that they are going to a social function is updated daily, and the person planning the function needs to have up-to-date figures of how many people have committed to attend, the numbers are added up automatically as each new entry is entered. If the planner wishes to alphabetize the list which she had not thought of alphabetizing before, the task can be done immediatly by sorting the name list in ascending order. One can clearly see that a major advantage of using spreadsheets is that once the data is entered, it won't have to be retyped, if the user thinks of a new way that to manipulate the data.

The Logistik spreadsheet allows for a grid size of 2048 rows by 1024 columns, which is equal to 2,097,152 cells. Two million cells is more than any user would ever want, even if his computer memory could handle it since he would not be able to keep track of this many cells -- nor would he want to! The version that I am reviewing here is the "Junior Version", 1.1, and is intended for use with the 520ST, and doesn't allow for graphics capabilities, due to memory limitations. The regular version with graphics is available for ST's with 1 MEG or greater and is reviewed later in this article.

Logistik is as powerful and as convenient as other spreadsheets I have used, including "Framework" by Ashton-Tate, which costs $850. The suggested retail price for Logistik, by comparison, is only $ 99.99!

Logistik has several convenient options. The /Format command allows the user to format how the numbers will be displayed. For instance, if "Currency" is chosen, numbers are displayed with two digits following the decimal point. In addition, the user is given the option of using the dollar sign, pounds, or several other currency symbols. The /Replicate command allows one to have an equation repeat in one or more other cells of the spreadsheet. Thus, if the equation in A1(row 1,column A) is B1+C1, /Replicate can be used to input this equation into A2 where the equation B2+C2 would appear.

A convenient time-saving feature is the F3 RECALC command. The user can have the solutions in the spreadsheet calculated automatically as the data is entered in, or he can have the automatic feature turned off, and press the F3 RECALC key to perform calculations when he wants them to be done. Choosing the automatic calculation option slows down how long it takes to input the data because the computer has to make all of the calculations with each new number entered. Choosing the non-automatic option allows the user to input data very quickly, with no time delays. The user can then use the F3 RECALC command after each new row or column of data or even less frequently, saving a lot of time. I personally found this option to be very useful.

"Timesheet" is another feature of Logistik. This feature allows a company to monitor how much time and money is spent on a each step of a complete project. For example, if I want to find out how much time and money it will take my company to complete a book from start to finish, I could do so using the critical path method under the "Timesheet" option.

The /Kritical command allows the user to see the critical path of a project. Steps not needing attention at the present time (because they are not due for a while), are ignored, thus allowing the user to spend his time on those projects that are most urgent.

(continued...)

Logistik (continued...)

By this point, you may be asking what this "Critical Path Method" is, and I'll try to explain it, briefly. The Critical Path Method, also known as the C.P.M., allows the project planner to determine the shortest amount of time required to complete a project. In my case, I would want to know the shortest amount of time in which I could complete a book, including the assembling of research material, artwork, the actual writing, editing, etc. Some steps of the book's process may be put off, while delaying other steps would interfer with the completion of the book in the shortest possible time. Certain important steps are considered to lie on this "critical path", and if these steps were to be delayed, or their scheduling was not properly done, the entire project might be delayed. For example, if Step 1 is to write the book and this process takes four months, Step 2, the design of the cover, would not have to be started right away since it only takes a half-a-month to complete. If these two steps were the only ones necessary to complete the book, Step 2 could be started three and one-half months after Step 1 was begun, and would still not delay the project, which would have a total completion time of 4 months.

When the project only involves 2 steps, it;s easy enough to calculate just when each should be started, but when the project involves 17 steps, such as the real situation in my production of a book, the starting times of the steps become far too complicated to plan without the aid of a computer. For this reason, the Logistik spreadsheet package is heaven-sent! In addition, the total cost of the project is also computed, with the costs of each step being added up, to arrive at the project's cost.

You are probably asking why you need this "Timesheet" feature in your software library, and that's a good question. You might not ever need it, but businesses can benefit greatly with this feature. Critical Path Method software can run up to $1,000.00 and more. This is a welcome bonus to this spreadsheet package, which should be welcomed with open arms by small businesses. Business applications software is greatly needed for the ST, and this package is helping to fill the void. I found only two drawbacks to this spreadsheet package. The first complaint I have is that the directions for the commands have not all been reworked from the IBM PC to the Atari ST.

The Critical Path Method... allows the user to determine the shortest amount of time required...

For instance, Page Down is not explained as the shift key with the upwards cursor, nor is Page Up explained. My other complaint deals with the fact that more information should have been given on what the Critical Path Method is, for those who were never exposed to it. The directions on how to use the Critical Path Method could also have been written much more clearly, and should have been given in much more detail. I have taken two college courses that dealt with this subject, and I still spent several hours figuring out how to use it. Other software packages I've used in the past were much more user friendly with respect to the C.P.M., but these two complaints are minor.

The Logistik spreadsheet is a fine piece of software possessing the quality of spreadsheets that cost more than eight times its price. After setting up my company's complicated expense accounts on this spreadsheet and projecting project durations with it, I am sold on how much time it saves and how much it relieves day-to-day headaches. Logistik, Jr. is well worth its price of $99.99.

Logistik Senior, v. 1.1

The Senior version is functionally the same program as the junior version, with the addition of graphics capabilities. To use the senior version, the user must have a 1 MEG or greater ST, as the 520ST can't handle the graphics with its memory capacity. This version costs $149.99, which is $50 more than the junior version.

Several types of graphs can be made with this software. The types include pie, bar, and Gantt charts, area graphs, line graphs, step graphs, tick graphs, scattergrams, and spread graphs. There are a number of character fonts and sizes, as well as many line styles and thicknesses to choose from. Many creative colors can also be combined to make these graphs, if a color monitor is available. There are so many combinations and options to choose from in creating charts, and in labeling them, that it seems as though the sky is the limit in the types of graphs that the user can create.

I feel that the method of choosing the data for the graphs is too cumbersome with this spreadsheet package. Each cell of data has to be named, which is both time consuming and frustrating. Other spreadsheets I have used, allow the user to simply highlight the data to be included in the graph. I would imagine, however, that the method of data selection for the graphs is not overly critical, so long as the user doesn't have to

(continued...)

Logistik (continued...)

create numerous graphs, and most likely, the average ST user would not use this portion of the program enough as to be hindered with the data selection device used.

Another problem I have with this senior version is the added cost. It doesn't seem to me, to be worth an extra 50% in cost to have the graphics. However, I can also imagine an ST user buying the junior version, and then kicking himself when he needs to create graphs for his homeowner's association, where he's just been elected to an officer's position! Buying a whole new spreadsheet package would set him back another $100 or more, so the bottom line is that you never know when you might need the graphics capabilities.

Since it is true that an audience is much more receptive to a presentation aided with visuals, especially if they are sharp-looking computer-gener- ated ones. I can recommend the Logistik Senior Version, if you feel that you might want to generate graphs from your spreadsheet data in the future. If you don't feel that you'll need, or want to make graphs, I consider the junior version to be the better buy, but you can't lose with either version, because they are both of a high quality, and are much more economical than other spreadsheets on the market.

❑

David Leinecker is Vice President of Computer Spectrum, Inc., an educational software publisher in Miami, Florida. He holds a B.S.B.A., Marketing from the University of Florida, and is presently nearing completion of his Master's degree in Business Administration at Florida International Universtiy.

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The Atari ST Desk Accessory Cartridge

From: Quantum MicroSystems, Inc.
Liverpool, N.Y.
(315) 451-7747

Suggested List: $99.95

Reviewed by George Bliven

Before I start a detailed review of this product, let me say that this accessory package from QMI was a treat to work with from the beginning. The software packaging was eye-catching and not only listed the 14 accessories contained within the cartridge, but allowed the consumer to see a picture of each of the utilities on the packaging. All one has to do is pick up the software package and turn it over to see a pictoral display of the screen as it will appear on your ST monitor. This, in itself, is a definite plus.

DeskCart, simply put, is a cartridge and software package, that includes 14 desk accessories and a battery-backed digital clock. The 14 GEM desk accessories install in the space of one desk accessory and almost all of the memory needed is utilized in the ROM (read-only memory) of the cartridge. The accessories are accessed by going to the area where you normally find your desk accessories, pulling down the menu and clicking on "DeskCart!" DeskCart allows you the use of any drive connected to your computer instead of limiting you to drive A and B, like many other programs.

QMI placed a lot of pride in the writing and printing of the manual. They kept it short (41 pages), and it was clearly and concisely written. Sigh! At last, a manual for those of us that hate to read manuals! Thanks, QMI.

Let's start with the first accessories listed in the manual, the Calendar and Appointment Book. The calendar can select a date between January 1940 to December 2040, for those of you who like to time warp. On any given time and date, you can schedule appointments through the calendar, and set an alarm to signal you as to upcoming or current appointments, or if an appointment has passed, if you had your computer off at that particular time. Time and date can be added into each of your records. The appointment book operates like a database. It contains fields for time, day, month, year, subject and comments. In using the appointment book, you have the following functions at your command; add, update, find, delete, print and clear. In addition you have two scroll arrows that allow you to page up or down within the appointment book. By entering a single character in the appointment book you will activate the alarm function.

Have you ever had to find a piece of paper in the middle of working with a GEM program to write down some important notes? This can be quite annoying! In DeskCart, there is an accessory called "Notebook." While you are working with any other GEM program, you can access the notebook to write down your thoughts. Now, this is nice, and as a matter of fact, that is just what I am doing while writing this review and the feature works very well. After entering your thoughts in the notebook, you have 5 icons at the bottom of the window that control the various functions of the notebook. You may simply click on one of the following commands and it will be performed: Load (meaning load a file from the disk); save; print; find (you will be prompted for the top or bottom of the page); erase. Each notebook that you create allows you 12 pages of room in which to include your information. Once again, you have a highly useful accessory that is complex in nature, yet simple to operate.

DeskCart's Card File Accessory is similar to the appointment book accessory, in that it is also a database operation and has the same operative icons; add, update, delete, print, clear and the scroll arrows. Located under the key field, "index", are nine other separate fields, shown as lines 1 through 9. This enables you to set categories for your card file information. By labeling categories using the nine field lines, you can set up a search pattern within your database.

The Card File, Appointment Book and Address Book accessories, are all database-oriented accessories. They are not a full-blown database, but they are structurally the same, and accessable from any GEM-based program. The DeskCart manual explains the use of the database and its importance in the keeping of records.

The next accessory is useful to some and will be used very little by others: a calculator. Now, I can handle my one plus two apples and my guzintas, but this calculator takes mathematics to a higher level. It is easiest explained as a direct quote from the manual: "The DeskCart Calculator is a multi-function scientific and programmer's calculator. By scientific calculator is meant one

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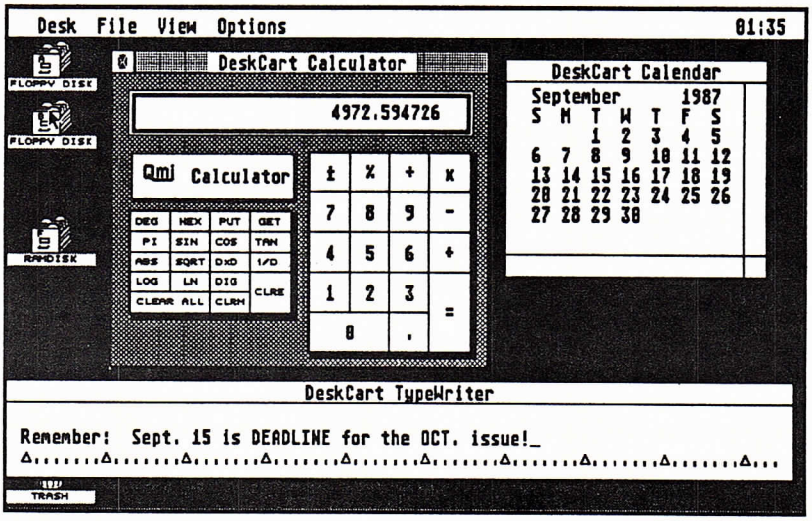
DeskCart! (continued...)

with exponential notation and scientific operators. By programmer's calculator is meant one which does hexadecimal calculation and arithmetic logic functions." The decimal mode of the calculator covers the following functions: rad/deg (radians and degrees), hex/dec (hexadecimal/decimal), put (puts the current number being displayed into memory), get (the opposite of put), log (logarithm of a number), Ln, (the natural logarithm), dig (the number of decimal places to be displayed), clre (clears current memory), clear all (clears everything from the calculator) and clrm (clears the memories, but leaves the display as it is). In addition to these commands you have at your disposal; Pi, sine, cosine, tangent, absolute values and square root. The hexadecimal function pad offers the following commands: negate, left shift, a b c d e f, right shift, AND, OR, and XOR. All in all, this calculator is quite complete, and functions very well. The keypads are laid out just as they would appear on a computer. The numerical keypad responds to either mouse or manual entry from your computer's numerical keypad.



Various Accessories may be called to the desktop simultaneously

DeskCart has included a typewriter accessory. Now this may not seem very useful to most, but it is a quick way of dropping off and typing a letter or note to your printer in the middle of working with some other GEM program. The accessory displays a typewriter window at the bottom portion of your monitor, and allows you to additionally set special printer codes by merely entering the characters. Not an "absolutely necessary" accessory, but quite useful, in lieu of dropping out of a current program to boot-up a word processor to type a note.

The Address Book is the final accessory using the database functions of DeskCart. It is an address book that not only keeps track of your addresses in a database, but will also dial entered numbers in the selected record. You have the option of entering two telephone numbers and selecting either to dial. The dialer accepts pulse or tone dialing but must have a Hayes-compatable modem connected, in order to work. After you dial the number, you have a choice of either picking up the telephone for voice, or going directly to the VT-52 terminal included as an accessory in DeskCart. The address book fields include: First Name; Last Name; Address; City; State; Zipcode; Telephone 1 & 2; and a comment line. The only thing that disappointed me a little here was the lack of character spaces in the First Name field. You are limited to 12 characters, whereas, in the Last Name, you have 24 characters available. Not that important, unless you would like to enter two first names like Martha & Daniel or Mr. & Mrs. William. As the address book allows you to print, you may want to enter two first names. Other than that, it is well constructed and fully functional.

DeskCart includes a VT-52 terminal emulator. The emulator is basic in nature, and does not allow file transfer operations or contain the bells and whistles of full-blown communication packages. It does, however, allow the user to set the most common features needed for basic telecommunications such as baud rate (up to 9600 baud), parity, duplex, and then make the standard connection with another computer. This is great if you do not wish to drop what you are doing and boot your favorite telecommunications software.

Through DeskCart, you have the capability to create keyboard macros. With these macros, you can call up any of the other DeskCart menu functions, or create special macros of your most-often-used phraseologies. Say for instance, that you always sign off from a BBS in the same manner, then all you would have to do is enter this as a macro and call it up when signing off from a BBS while in DeskCart's VT-52 Terminal Emulator. The macro menu consists of the following commands: Load, Save, Erase, Add, List and Quit. Again, these appear as icons in the DeskCart MacroKeys alert box and are used by simply clicking on the appropriate icon with your mouse. These macros can be called from within any GEM application.

Most of you are familiar with ramdisks by now and find them very useful, especially if you are limited to only one drive. DeskCart's Ramdisk allows you to set the size of your ramdisk, allocate its label, install, remove and erase the ramdisk. Once you have

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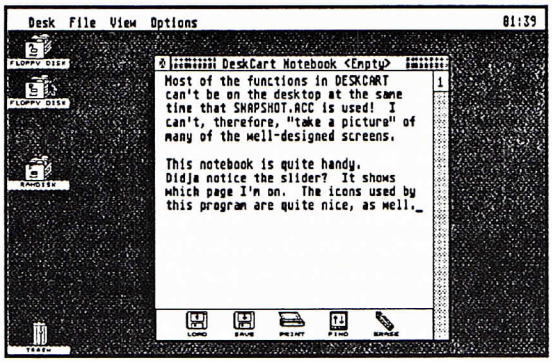
DeskCart! (continued...)

decided on the proper size for your needs, you only have to save the ramdisk, and it is there each time that you boot your computer! Remember, however, that a ramdisk is a volatile storage area for files and programs. When you shut off your computer, you lose the information. I have a double-sided floppy drive connected, as well as a hard drive, to my computer, and still find the necessity for another drive. DeskCart's ramdisk fills the bill and is a good accessory.



The Notebook accessory can be used for saving short notes to yourself

QMI included a disk utility accessory with DeskCart and I must say that this is a relief! I have in the past, found occasion to need to format a disk, rename a file, etc. and have had to stop everything and go back to the desktop to perform these functions. The disk utility accessory in DeskCart allows you to copy files from one drive or place to another. It deletes files, formats disks (in extended format also!), renames files, and gives you status information on the drives connected to your computer. All these functions are accessible from within an alert box by clicking on the appropriate icon. I found this accessory to be especially useful to me.

This next accessory is important to those of us that have better things to do than wait for our printer to finish a document. QMI has seen the wisdom of including a print spooler as one of the accessories in the DeskCart package. The print spooler offers you the following information and function control over the printing of your documents: System Free Memory, Bytes Left to Print; Spooler Memory; Lines Per Page; Line Spacing; Fixed Tab Spaces; Left and Right Margin setting; Options off/on; Serial (for serial port transmission); Parallel (for parallel port tranmission); New Page Erase; Off and on. It's a well-constructed print spooler, and allows the user a wide range of versitility.

QMI has also included a control panel as an accessory in DeskCart. This replaces the control panel from TOS and is customized to accomodate the functions of DeskCart as well as the standard functions of the TOS control panel. The main differences are the clock, clock display and alarms. The DeskCart control panel allows the user to manually set the time and date within the cartridge. The clock display, in the upper right corner of the screen, can be turned off and on from the control panel. In addition to this you can set your auto alarms from within the control panel. These are the alarms that are set from your appointment book. As I stated before, all of the normal functions of the TOS control panel such as, mouse click, key repeat, key delay, key click, etc., are also available from the DeskCart control panel.

The screen dump accessory included in DeskCart allows the following functions to be performed: Load Driver.. this lets you load a printer driver from disk. DeskCart supports the same printer drivers as Degas(TM). You can print your screen either vertically or horizontally. The same rule has to be followed, "Alternate-Help" to begin the dump, but an "OK" icon is provided to quit the screen dump when you wish to stop the printing.

The final accessory included in DeskCart is the memory test. This does checks the DeskCart cartridge, checks the computer's memory and the version of TOS that you currently have installed in your computer.

I had a tough time finding fault with this hardware/software package. QMI has spent alot of time and care in its development. It's difficult to part with money, but in the interest of supporting our passion of computers as a hobby or as a business, this package from QMI is worth the price. In the future, I think that an addition of the ever-popular archiving utility and possibly a good and creative disk labeling accessory would definitely serve to improve the already excellent quality of this package.

Like all new programs of this complexity, there *are* still some bugs residing, and QMI is endeavouring to correct them. At present, they know that multiple-file functions don't work, in spite of the manual's comments, and that no bells are set off by the alarms, although the correct dialog boxes do appear on schedule. Word Writer 2.0 seems to have problems with any print spooler, including this one. If you know of any others, be sure to notify QMI, so that they can correct it. To date, no upgrades have cost registered owners a cent, so let's hope they keep it that way!

In conclusion I would like to say that DeskCart is a piece of hardware/software, that will appeal to the novice as well as the experienced computer user. We have "Power without the Price", and now we have "Performance without the pain!"

❑

George Bliven is a retired Police Officer, living in Vermont.

The Adventurer

by Sara H. Groves

The game companies seem to have outdone themselves lately. In fact, there are so many great new games out, I haven't had a chance to even start them all. However, I can give you at least a general review of those I haven't played and can assure you that they are all well worth it. From the size of the current crop and games already announced, it sounds like the days are gone, when anyone who was truly addicted, could play every one. The larger companies are increasing their output, and the smaller, newer companies are porting their games far faster than they ever had before. Not only that, the overall quality has never been better.

The only logical way to do this is in order of appearance, which means the two new Infocoms first. While I haven't even broken the plastic on **Stationfall**, those who have played it recommend it highly, as a fitting, if not quite equal, sequel to *Planetfall*. The ending is quite controversial, especially in the area of whether it leaves the way open for another sequel. Steve Meretzky specifically states that he wrote it that way so he wouldn't have to write any more and then smiles enigmatically, when pressed on certain specific details. The concensus is that he does not intend, nor want to write another, for a variety of reasons but, should circumstances change, he might consider it. In sum, it's very unlikely but "never say never".

I have completed **Lurking Horror** and it's great! Generally, you are a student at G.U.E. [George Underwood Edwards] Tech and have braved a major snowstorm to complete a 20-page paper in the main computer building, because all the dorm terminals are occupied. As you sit down to work, something goes wrong and you "fall asleep" at your teminal. You "wake up" to find all the work you had done on the paper is gone and feeling a compelling urge to go exploring, which you do. What you find is a nightmare world with monsters, zombies, and all the things you fear when you're alone, and it's dark. The puzzles are excellent and logical, not impossible but enough to tax your ingenuity. It's not truly linear, so you can often return to a puzzle you are stuck on, after doing something else, although you will need certain items from one area in order to complete others. There are subtle hints and clues sprinkled in and it is necessary to read the descriptions and note the locations of just about everything. The biggest problem I had was jug- gling my inventory, since many items are used more than once and a few are useless, but there are places you can stash the excess. Just don't lose your light and, above all, *DON'T PANIC*.

Guild of Thieves, the long-awaited "sequel" to *The Pawn*, has arrived and it's great! The pictures are even more beautiful, and there are more of them; the story line is improved, there are no truly peculiar parser problems, and it has many enhanced features. My favorite new command is "go to". In theory, this should eliminate the need for mapping as you need only type "go to [room]", and watch the locations in between scroll by. In practice, this is not quite true, as you need to keep excellent notes on both the names of the various places, exactly what can be found there, and specific problems involved with passing certain places along the way. However, it does save a lot of typing and "note consulting" as you criss-cross your way around the island. The hints are, indeed, improved, and many will actually tell you how to solve the problem. The parser isn't so much expanded as simplified. In Pawn, the worst problem was often finding the exact word it wanted in order to solve a problem. In GoT, they generally allow you to simplify the command enough to avoid hours of total frustration. Just don't forget that "search" is NOT the same as "examine". In general, the game is slightly easier than The Pawn and, in my opinion, even more fun. It's also more logical. They've even sprinkled little hints in all over the place, which go a long way toward eliminating the peculiar "off the wall" solutions which seemed to *require* hints in Pawn, so make sure to read *everything* you find, and check out anything that looks the least bit odd.

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The Adventurer (continued...)

Sierra's **Leisure Suit Larry in the Land of the Lounge Lizards** is here, and it's very popular. My copy just arrived yesterday [the deadline's early this month] so I haven't played it yet but everyone's raving about it. If you're a dirty old man or you know how they operate, it may seem surprisingly easy, but well worth playing. The only complaint I've heard is that it's a port of Sierra's old *Softporn Adventure*. This is unconfirmed as Sierra says it's quite different, and others say it's the same. If anyone else has played both, please let me know.

It turns out the 98 point maximum in *Golden Path* isn't a bug. The author finally got back to us, and said "No one's perfect, so no one can get 100 points." [Honest. That's what he said.] I still enjoyed the game but I would have liked it even better if I hadn't had to start all over every time I hit the left mouse button instead of the right one, and the ending had been a bit more satisfying.

Lately, we've been involved with playing the *Zorks* on Gamers'. There's a special subtopic set up and we had a formal COnference with Dave Lebling on July 28th, which was a great success and a transcript is available in DL1. As it happens, when I would otherwise have been playing the Zorks, my interest was focused on graphics games, and in addition, I really didn't care for my first Infocom when I finally got around to it. As a result, I'm playing in the Zork Festival [as it is called] rather than giving hints to others. Yes, it's true, this is my first time! However, with a bit of perserverence, I'll be able to understand so many of the references that people have been making all this time. At least there are lots of us.

Infocom has three more games scheduled for distribution this fall. It's been a little confusing this summer and I'm not certain of the order on the first two but I think the first one is **NORD** and **BURT COULDN'T MAKE HEAD** or **TAILS OF IT.** [It may not be the exact title but it's close. Honest.] It's a series of 8 games described as "verbal trickeries" written in a system which Infocom calls their first "semi-PLUS". Basically this means it's a small size PLUS game, and while it will be available for the C-64, it will not be available for the Atari 8-bits - although it would fit. The reasons for this are discussed in more detail in my other article for this month.

Coming in September is **PLUNDERED HEARTS**. This game has been called Infocom's first entry into the Romance genre, and is the first written by a woman. It's "aimed specifically at women although male playtesters enjoyed it very much". You play a 17th century heroine sailing the Carribean, to aid your ailing father. It includes tropical nights, treacherous characters, and the hazards of sailing the high seas. The package includes a letter from Governor Jean Lafond and a 50 guinea note from the Bank of St. Sinistra. It will be available for both the 8- and 16-bit Ataris, and from the comments I've re- ceived, it is an excellent game.

Towards the end of October, Brian Moriarty's next game, **BEYOND ZORK**, should arrive. This is the first to be written in their new "Super-PLUS" system, which has a "new presentation mode although you can play it like a normal game". [You can use a joy-stick if you want.] It's set in the G.U.E., has some RPGish elements, grues, ur-grues, and the Coconut of Quendor. You'll recognize some of that, if you've played the Zorks, more if you know about the original main-frame Zork, but, if you've played Trinity and have some idea of what Brian is like, you'll know it will be a stunning game, and far different from anything you've seen before. Availability is the same as any PLUS game. ST only.

Firebird Licensees has sent me some information on various things but I have not seen it yet so will have to hold off until next month.

Question Time.

Bureaucracy: *How do I get rid of the stew? Obviously I can't eat it and the stewardess won't let me ignore it. If I drop it on the floor it burns a hole in the airplane and, certainly, no one else wants it.*

A. Have you ever sat in an airplane with a drink when the person in front of you decided it was time to relax? You already know the buttons are all mixed up. Try wearing the earphones and playing with things a bit. Don't forget to come back though.

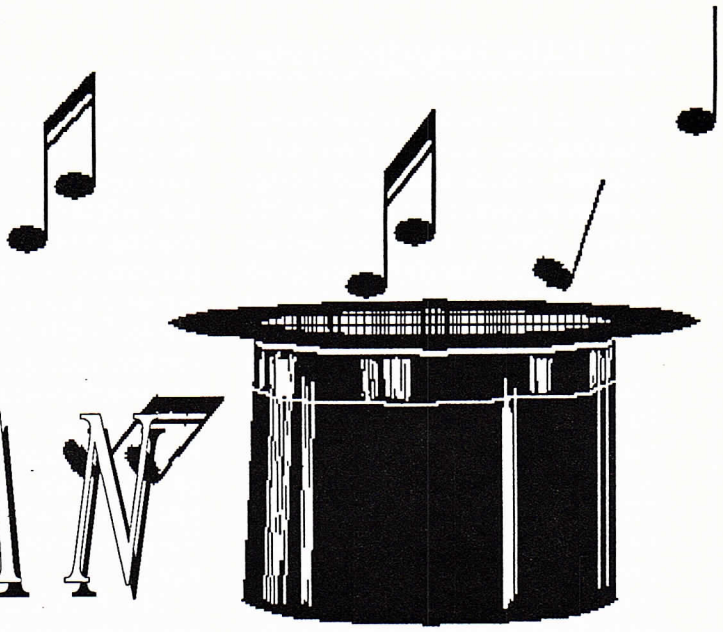
Space Quest: *What's with the Orat? He's practically invulnerable!*

A. Actually, he's got the toughest hide of any creature you ever encountered but it's all on the outside. First make sure you've found him. He and his cave are very large and located near the stone bridges. He also has an enormous appetite and isn't the least bit fussy about what he eats. Have you checked your inventory for something that might be dangerous to such a creature? Bang!

Lurking Horror: *I think I need a key from the Hacker but he won't give me any.*

A. Sure he will but only if he's approached in the right way. Wait until he asks you for something and then go get it for him. Fix it up to his liking and make sure the key you get from him is multi-purpose.

The MIDI MAGICIAN



by Brooks Reid

Now that there are several well-written software-based sequencers for the ST, it becomes difficult to decide which one best suits your needs. The most popular ones seem to be the Dr.T's KCS, Hybrid Arts SmpteTrack, Steinberg Pro 24, and Sonus Masterpiece. In addition, there are also programs by Beam Team, Fast Tracks, and others, as well as intro-level versions. Prices range from $50-$600, and each program has its own good and bad points. Which one to choose is a tough decision, and since I own and use two of the most popular programs, I'll try to shed some light on the confusion.

The Dr.T's KCS is a full-featured MIDI sequencer software, running on either the Atari 520ST or the 1040ST, and selling for $195. Its original version (1.0) boasts of a powerful 40,000 notes on the 520 and 127,000 notes on the 1040! Its most recent version (1.5) has more features and makes more use of the mouse than earlier versions, which helps ease the operation, but also consumes some of its on-board memory for note storage. Note memory is hard to make accurate estimates for, because notes often contain control data, which eats up RAM. All mouse operations can also be done from the keyboard if you prefer.

The KCS operates in three modes: TRACK MODE, OPEN MODE, and SONG MODE. The idea here is to create your parts in TRACK MODE, like recording on a multi-track tape recorder, and when enough tracks are completed, group them in sequences in the OPEN MODE, and then chain them together in the right order in SONG MODE. There are other ways of approaching the process and this is just one technique. Users of the Commordor C64 and C128 will already be familar with the OPEN MODE, since this is the only mode available in these versions. Each mode has two screens; in TRACK MODE,the main page displays tracks 1-32 (tracks 32-48 can be accessed by a keystroke). In addition, there are mouse-driven tape recorder type transport controls, (record, play, pause, stop, fast forward, and fast reverse), MIDI clock source, Tempo, auto locators, and other MIDI functions.

The TRACK MODE second page is where editing takes place. Here, all the MIDI data recorded in TRACK MODE is displayed numerically by measure, event, time, MIDI channel, type, note, velocity, and duration. That's right -- it's a lot of numbers! This is the biggest complaint from a musican's standpoint, since editing doesn't relate, in musical terms. For instance, an eighth-note duration is a value of 12, since MIDI clock rate is 24 pulses per quarter note, and an eighth note is half the value of a quarter note. If you would like a two-bar count-in, you would enter a value of 192 (2 bars x 4 notes x 24 pulses). Of course, you can change the 24 pulses per quarter note to a finer resolution, for more exact requirements, but if you choose this option, you'd better dust off the old calculator!

At the left side of the edit screen, there are arrows, which allow you to scroll though your info, and on the right side are lists of lots of options. These include: Name, Transpose/Auto Correct, Insert, Cut, Copy, Paste, Delete, Erase, Make Backup, Get Backup, Print, Change Repeats, Step Time Append, Change Tracks, Copy Track To Track, Split, Append Seq To Track, Delete Track, Copy Seq To Track, Copy Track To Seq, Seq To All Tracks, All Tracks To Seq,

(continued...)

The MIDI Magician (continued...)

Clear All Tracks, Load/Save, blaa,blaa,blaa. Luckily, there is the Help key, which sometimes brings up answers (that's the one I use the most). There is also an option page, which is helpful to set up all your MIDI details, as if you haven't got enough already!

The OPEN MODE can also be used as a starting point, but its forte' is its flexibility. Here, you can shuffle and change all aspects of your sequences around. The SONG MODE operates like the song mode on a drum machine; you can take your sequences and put them together in the order you want them to occur. You can also transpose and repeat sequences, too. This is, of course, a brief description, and can't begin to explain all aspects of such a comprehensive program. Wheew!

One neat little option is called "VARY". This is a simple version of a variation generator called the Algorithmic Composer, already in production for the Commodore. Keyboard magazine recently ran an interview with Jan Hammer, who talked of his use of Dr.T's C64 Algorithmic Composer, for creating music for *Miami Vice*. Its purpose is to mutate, and thereby inspire a new life form. Those old cliche' riffs will take on new vitality, your boring sequences will be transformed into masterful works of art, and astound your friends, or maybe it will just screw up a perfectly good idea. Anyhoo, you will be seeing a full-featured Vary Generator for the Atari ST soon.

The Dr.T's KCS takes a little time to master, but it's well worth the effort, as it can handle even the most demanding pro applications. Since the manual was written for the original version (1.0), addenda have been included for updated versions, making an already cumbersome text even more awkward. A new, final version would be a welcome addition! The program has cleverly evaded any homestyle backup attempts, so plan on sending in your warranty, and your $10 for a factory backup.

Next time, we'll talk about the Steinberg Pro 24. Its new version has some great features, which are quite different from Dr.T's. Until then, keep the shiny side up, the tank full and the bugs off the windshield.

R E M E M B E R ! Views expressed by the Brooks are his own and do not necessarily reflect the viewpoint of The Atari Journal or any of its affiliates. (!)

Brooks Reid likes to fool around with musical goodies, so we let him do this sort of thing as therapy. If you ever have the chance to stop by a Tony Roma's Place For Ribs, you might catch Brooks playing a set or two.

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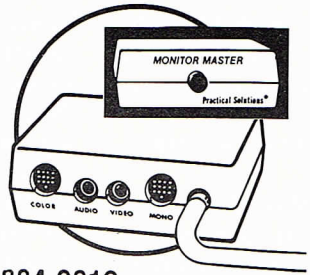

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The Beginner's ST

Part 11

by Steve Tearle

Hey! What Brand of Computer IS this???

There's a buzzword in the Atari ST community these days, among the developers and users, dealers and publishers...the word is *EMULATION*.

In computer terms, to emulate something means to work like, or act like another type of computer or operating system. The Atari ST has its own operating system, TOS, and an overlay, GEM, built in. But, those operating systems can be "turned off" and replaced by others. A public domain version of **CP/M** (Control Program/Microcomputers), a very popular operating system, has been available for the ST for over a year, and works exceptionally well.

In the commercial market, the ST is a natural for which to create emulators because of a number of reasons; system cost is small, the ST runs at a fast speed, the resolution is acceptable for many other systems, and the ST drives are fairly flexible in their performance. Therefore, developers have done just that. In fact, the ST owner today, finds himself with not one computer, but, with a little spare cash...three or four computers!

The emulator that I get asked about most often is David Small's **Magic Sac**. The Magic Sac is a cartridge that plugs into the Atari ST computer and turns it into an Apple Macintosh(tm) computer! The Mac is a very popular (but expensive) computer system. It's been around a bit longer than the STs, and has been well supported. The software libraries are extensive for the Mac, both commercial and PD. The cartridge contains the Macintosh 64K ROM chips, so you are actually adding a part of the Mac to your ST. A program then does all the dirty work of turning the ST into a Mac. Depending on the amount of memory in your ST, you can have over 800K free in your 'Mac'. David Small is constantly upgrading the Magic Sac software, and it currently supports double-sided disk drives, and even ST color monitors! However, since the Mac has a monochrome computer, the Magic Sac works best on an ST monochrome screen. The resolution is actually higher than a Macintosh, and the software runs 20% faster than on the Mac! Software is a bit of a problem though. Because the Mac uses a variable-speed disk drive, the ST drives (IBM-type) can't read a Macintosh disk directly. This means that Mac software must be transfered to 'Magic' format disks. This is easily overcome though, as many BBSs and networks have software to download via modem, and many user groups are creating 'Magic' disk libraries of the Mac PD software. Even some Macintosh BBSs have special 'Magic' sections for the Atari owners!

The most popular computers in the United States are the MS/DOS (read IBM!) operating system types. Although IBM has recently introduced a new series of computers, the MS/DOS machines are so firmly entrenched in the American business community that it will be quite a few years before they outlive their usefulness. Although the IBM-PC(tm) and its clones are rather...archaic... compared to the ST, there is a lot(!) of software, and some exceptional business software, that is available. The first PC emulator available for the ST was called **MS.EM**, and was a grave disappointment. The folks who bought it cried long and loud at its failings, and there was no hope for this type of software emulation on the horizon until...in stepped Avant Garde Systems of Jacksonville, Florida, and **'pc-ditto'** (lowercase theirs). Pc-ditto has been gleaning rave reviews on CompuServe and the other networks. Priced under $90, this program runs over 350 titles, maintains enough speed, and seems to be 'the' way to go for PC emulation on the Atari ST. We have a review elsewhere, here in the Journal, and Antic, Analog, Start, and Compute! are sure to review it. The best I can say at this time is, that based on what I've heard from knowledgeable folks, this is a valuable addition to the ST library. Since many commercial programs are available on 3.5 inch diskettes in a format that the ST can read directly, it becomes a very useful emulator indeed.

Like many Atarians, I came over to the ST from the Atari 800 8-bit computers. I had an extensive library of software and enjoyed the 8-bit, but was forced to sell my system to raise money for ST goodies. What a pleasant shock to come across an "Atari 800 emulator" in the PD network one day! Booting the program, I got what was promised as a 'rough' version of a working 8-bit emulator. Also by the same author was a 'rough' Apple II(tm) emulator! The author, Derek Mihocka, has continued to refine the Atari 800 emulator and it's said to be close to perfection, and it will be released through an Atari magazine sometime in the future (and known as the **"Transformer"**). Atari Corp. has approved the use of the 800 ROM code, and I, for one, am very excited about it.

OS/9, a popular multi-tasking operating system is said to be available for the ST, but I have no details at this time. A Commodore 128 emulator is said to be floating around, but again, I have no details. At any rate, we (ST owners) CAN run ST, MacIntosh, CP/M, MS-DOS, and soon, Atari 8-bit software. Wow!, now..WHAT brand of computer was this???

The Magic Sac by:

✓ Data Pacific, Inc.
609 E. Speer Blvd.
Denver, CO 80203-4240
(303) 733-8158

pc-ditto by:

✓ Avant-Garde Systems
381 Pablo Point Dr.
Jacksonville, FL 32225
(904) 221-2904

Review:

Regent Base v1.1

by Frank Cohen

Regent Software
7131 Owensmouth, Suite 45A
Canoga Park, CA 91303

$125 Sugg. Retail

by David Webster

Regent Base 1.1 is a relational database management system that combines the GEM environment of the ST with a powerful mainframe query language that allows programmers and software developers to create custom applications. Don't confuse this product with the numerous dBASE clones that are running around (like DBman). To quote Regent Base designer Frank Cohen "I hate clones!". Regent Base was designed specifically for the ST, and provides true relational database capabilities based on standards set for IBM mainframes.

Regent Base is not really a database program, it's a database programming language. In order to effectively utilize the power of Regent Base will require some time and effort to learn the SQL (Structured Query Lang- uage), so programming experience is really a must. The language is simple to learn though, so a rudimental knowledge in BASIC is enough for you to get started. With the aid of a slick form design utility, custom screens can be easily created, complete with mouse buttons to direct program flow. These screens are combined with an SQL program to create executable "forms" or templates. Applications that can be created can range from a simple mail list manager to a full blown accounting system with custom reports. The range of applications is limited only by your imagination.

This review is for version 1.1. If you have version 1.0, you can update to 1.1 for $25, in which you'll get the 1.1 disk and the revised manual. There have been many improvements so 1.0 owners should consider upgrading.

WHAT YOU GET IS WHAT YOU SEE....

Regent Base will run on an Atari ST with one disk drive and 512K; however, for optimum performance, 1 meg of RAM and two floppies, or better yet, a hard disk is recommended (I tried Regent Base on a hard disk, and once I did, it was very hard to go back to floppies). You get two disks, one with the Regent Base programs and the other with some sample forms, like a mail list manager and a checkbook reconciler, that are useful for experiment- ing with the SQL language. The program comes unprotected, which is refreshing. A special INSTALL form is used to move the programs to a hard disk or a subdirectory.

The Regent Base System consists of five programs:

- *Main Menu* - The Regent Base Main Menu.is used to call the otherprograms or run custom forms or templates.
- *SQL Editor* -The SQL editor and forms processor.Used to run forms or process SQL commands. (Like a BASIC interpreter.)
- *Forms Editor* -Used to create forms. You select from a pallete of GEM objects and "paint" your screen displays, using the mouse.
- *Sort Program* - Sorts database tables. You can select up to three fields to sort.
- *Utilites* - Uses the mouse to visually create and modify database tables. Also imports & exports dBASE III files.

SPECS.....

The only real limit to database storage is disk space. You can have unlimited records per database and unlimited fields per record. You can work with any number of tables, although you can only relate to two at a time. The maximum field size is 32000 characters (is that enough for you?). Data tables can support seven data types including four date types. Once a table has been created, you can go back and change the table format at any time. Fields can be added or dropped and field sizes and names can be changed (That's one of the advantages of the relational concept - nothing is etched in stone - modifications are easily made to tables and data). All of this is done through the Utilities program which uses the mouse to make this operation a snap.

A (short) EXAMPLE OF A RELATIONAL DATABASE....

A relational database consists of one or more two-dimensional tables rather than one big file as in the typical file manager type program. For example, a retail store's database might have a table containing customer names, addresses and ac- count numbers, and another table containing account numbers and invoices to each account. By querying the database, you use the account number as the 'relation' and can select all the invoices to a particular

(continued...)

Regent Base 1.1 (continued...)

customer name. In a single or flat file database, the customer name and address would be repeated in each record, wasting lot's of space. This is a crude example of course, but the ability to link tables together by relationships allows a very flexible and expandable database where the data itself is independent from the applications. This makes it easy to plug in additional applications and tables without having to restructure the database.

Like I said, a *very* short explanation, if you want a REAL explanation, read ***"An Introduction to Database Systems"*** by C.J. Date. It's only 640 pages...!

A (short) HISTORY OF SQL....

The heart of the Regent System is SQL (Structured Query Language). Originally spelled SEQUEL, it was designed at IBM as a database query language for use on mainframe computers in the early seventies. It's the language used in DB2, IBM's mainframe relational database program. DB2 is based on the relational model defined by Dr. E.F. Codd. His model is considered by ANSII to be the standard by which relational databases are defined. There are several commercial programs for IBM PC's that support SQL, in fact, IBM's new System/2 PC's will have a new operating system called OS/2. To provide a link with mainframes, an enhanced version of OS/2 will support SQL. Regent Base follows the ANSII standard and is a true relational database.

The implementation of SQL in Regent Base is really a combination of SQL query commands and BASIC like procedural commands to control program flow. Just as in BASIC, you can execute a single or group of query commands directly from the editor, or use them in form (program) file. There are only about thirty commands, but they are very high level, meaning that one command will do what may take several commands in another language. The SQL editor functions somewhat like a BASIC editor, in that you can execute commands directly or from a program. For example suppose I want to list the contents of a mail list data- base to the screen, I type;

```
SELECT *
FROM
MAILLIST;
```

Pressing F1 will then execute it. This command will open the maillist table and dump the contents to the screen. This same command can also be used in a form as well. This is an example of the SELECT command which is the workhorse of SQL. There are about 10 different variations to this command so you can pull information in just about any form you want from one or two tables at a time and even append information to a third table. The other query commands are INSERT, UPDATE, DELETE, APPEND, CREATE and DROP. There is not enough space here to show the many ways these commands can be used to manipulate data.

Other features of Regent SQL are math functions, statistical functions, Expressions, variables (including time and date), and extensive print formatting options allowing up to twenty formats with provisions for headers, footers and page numbers. Twenty printers are supported, also you can send special printer codes from a program. Program control is via IF-THEN and GOTO commands. Writing a FORM is very much like writing a BASIC program. The editor is very interactive so you can test your programs as you are writing them or test small modules before adding them to your form.

PAINTING YOUR SCREEN....

The forms editor lets you design your own screen displays. It does that by providing you with a 'palette' of GEM objects that can be dragged into place with the mouse. There are four objects (boxes) you can use, a text box which is used for title displays and other text information like "Enter First Name". You can select from different GEM fonts and colors to create unique text displays. The edit box is where you would type in information to enter into the database, or to enter search criteria. Output boxes can be used

(continued...)

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Regent Base 1.1 (continued...)

to display messages to the user as to what to do next. The 'action' buttons can contain text lines like "Retrieve", "Save", "Exit". Clicking one of these with the mouse will send the number of the box that was clicked to your program. The USER$ command contains the number of the box that was clicked. For example;

```
USER$;
IF USER$=16 THEN SAVEIT;
```

These two lines in your procedure check to see what button was clicked. If you clicked button 16 (which to the user is the SAVE button), the program will go to the save routine to save the record. This makes it easy to alter the screen, because the program doesn't need to know where an object is on the screen. Since it's referenced by a number, you can move it anywhere you want. After creating your display, you go to the sequel editor to write your program. The program and the GEM display together constitute a 'form' that you can run like you would any other program (except that you can only run it in Regent Base, not by itself). Debugging is easy because you can move from the display screen right into the editor to make changes and then run the form again to check it out. Also, if you want, you can use Regent Word II to create your procedure files.

There are many other features of this program, too many to list here, suffice to say that Regent Base provides the tools and flexibility to create powerful custom applications.

A FEW THINGS...

I noticed a couple of things after working with this program for a while. Since it's such a high level language, program execution can be slow at times. Disk I/O has been improved, but is still slow on a floppy system. I saw the light with a hard disk. If you want to do serious development, this is only way to go. I encountered a problem using indexes, so I called Regent and spoke with Frank Cohen. He told me that some other people have had the same problem and he is working on a update fix that will be available free of charge to registered owners. He also said that unless you have a large file (60K or more), you really don't need to use indexes, in fact it slows down the updating and reorganizing of tables.

The revised manual, which is a big improvement over the original, still could use some more examples of how the various functions work together. A quick reference card would have been nice, as I'm constantly going through the manual checking for commands.

THE FUTURE....

While I had Frank on the phone, I asked him if he could let me in on future additions to Regent Base. He told me the following are in the works: a Report Generator to make it easier to create custom reports, a Form generator to create Regent Forms without having to program them, a tabular edit module that will let you examine and edit any table in tabular (spreadsheet) format. Future options will include the ability to 'hook' into other languages like GFA BASIC. Also more utilities to import/export files from DB Master One and VIP Professional and others. He told me that he hopes to eventually make Regent Base compatible with the R:Base Series V, which is a popular database program for the IBM PC's. And since Regent Base already follows the SQL standard, there could even be upward compatibility to the new IBM PC's (if anyone buys them) and even mainframes.

By purchasing a run time module and license from Regent Software, commercial software developers can create stand alone applications that can run without Regent Base. In fact, the MAIL MERGE DATABASE and INVENTORY MASTER programs, also sold by Regent, are actually Regent Base forms using the run time module.

There are also plans for a bi-monthly newsletter, informing users of new products and also present listings of forms created by other users. If you have a modem, there are already form files on CompuServe and GEnie that you can download and use. I recently got one that keeps a database of all your software. I'm modifying it to index and cross reference my "Modern Drummer" magazine collection. I've got 10 years of issues to index.

To sum it up, if you need a powerful and flexible applications language, you should check out Regent Base. You might not have to buy another program for a long time. It's been a while since I've done any programming (the last time was a dBASE program, come to think of it), but Regent Base even got me to shake the rust out and try my hand at some ideas that I had been thinking about, but were afraid to try.

When not trying his hands at drumming, Dave Webster sells and installs PC systems.

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The MAGIC Sac

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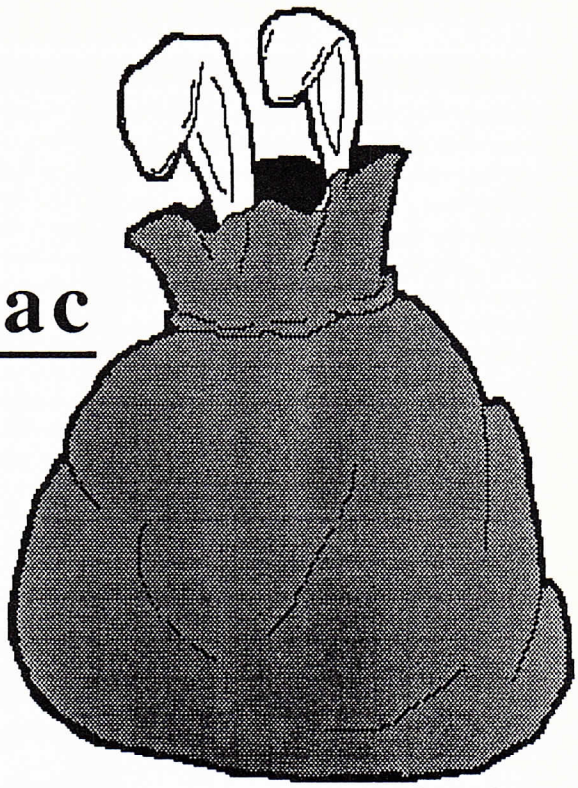

by Steve Tearle

Elsewhere in **The Journal** this month is my beginner's column. The editor decided that since it was *sooooo good*, a full-blown review of this product would be nice. Since he also wanted a 'theme' issue, and I hate to see Jack grovel, beg, and wimper (actually, I like it, but it scares my dogs!) I condecended and decided to go for it!

The Macintosh(TM) computer, by Apple, was the second computer-love of my life. I had had my Atari 800 for just over a year when I saw my first Mac. I thought at the time that I had the best micro around, with my good ol' Atari 800, but when I sat down at the Mac, I changed my tune! The bit-mapped graphics and screen clarity were incredible on a micro! The software was fun, and incredibly easy to use and the operating system was of a type previously unknown to micro users. The neat little disks, the mouse, the high-rez screen...in other words...WOW! Using MacPaint was a transendental experience, nothing else like it existed anywhere.

Yes, the Mac was a real heart-stopper back then, and...so was its price tag! The Mac was way out of reach for the average hobbiest, but I kept dreaming of that Mac, using every opportunity to use one, and searching the want ads for used systems. There never were *any* used Macs at a reasonable price ('cause the original price was FAR from reasonable!). But they did sell, the software manufacturers fed the buyers, and public domain libraries swelled for the Mac, and I continued to be envious.

Then along came the Atari ST - My saviour! My third micro-love and good friend for almost two years now. In the ST, I found that a lot of the drawbacks of the Mac had been addressed and corrected. These included the lack of color, the inability to remove a disk easily, the non-standard ports for printers or modems, and the constant disk access for the operating system. Additionally, the ST had higher resolution, and was actually faster. The established user base and reputation of the Mac had created an awesome library of software during those first two years however, and that software was still out of reach of the ST owners...that is, until David Small got this interesting idea...

It seems that the Mac and the Atari ST share a few important traits: the main one being that the CPU of both machines was the Motorola MC68000; both were pretty straightforward computers, no clutter, no fancy-pants co-processors, and the video output was fairly close in most respects. Realizing this, good 'ol Dave Small started playing with the notion of creating a Macintosh emulation system for the Atari ST.

He was successful.

Most of the Mac's operating system resided in ROM microchips, and was proprietary; that is, it was the property of Apple Computer Corporation. This was the main hurdle in bringing the emulator to market - Through negotiations with Apple, a compromise was reached, and the product was

(continued...)

The Magic Sac *(continued...)*

released under the name of 'The Magic Sac' as a "*peripheral*" for the Macintosh (strange but true)!

The Magic Sac (refered to as the 'Sac' from here on) requires three things to turn your Atari 520, 1040, or Mega ST into an Apple Macintosh: First, a Magic Sac cartridge, containing the Apple Macintosh 64K ROM OS chips (*Editor's Note: Dave assures us that while some rather unsavory characters have EPROM'ed these chips, that Apple* WILL *pursue that sort of theft, so be* SURE *that you obtain genuine Apple ROMs!*); secondly, the "*Magic*" boot disk; third, a Macintosh version of "Finder" (an Operating System, equivalent to GEM, but mostly on disk). A monochrome monitor is STRONGLY recommended for any continuous use, although the Sac will work on a color monitor, and it is almost impossible to use with a TV. Because the Atari ST HiRes mode actually has higher resolution than the Mac, there is actually some extra workroom on the desktop in some applications. The color modes of the ST, however, are of a lower resolution than the Mac, and while the Sac *does* work in color, it's blurry, and mouse movement seems sluggish.

Data Pacific, distributors of the Sac, supply only the empty-socketed cartridge and the Magic software. The buyer must then get the 64K Mac ROMs, and a Magic-format Finder disk. Don't worry though, as these items are generally available. The Mac ROMs can be found through many mail-order houses, or from Mac owners who did their own upgrades. The Finder disks, along with a complete library of Magic format public domain software is available from...you guessed it, *The Atari Journal*, or *Current Notes* magazines, or from many Atari users groups nationwide.

Once you get the Sac (!), you must install the Mac ROM's - this is a very simple operation for even the most fumble-fingered amongst us. Once the cartridge is reassembled, insert it into your ST's cartridge slot. Boot up the "Magic" program, and following the prompts, insert your Finder disk and you are greeted by the Macintosh startup screen of the smiling little Mac. Personally, I almost choked myself to death laughing, the first time I saw that little Mac on my Atari SM124 monitor! The "Magic" disk contains a lot of neat little utilities that you will need. The Atari ST formats a disk and creates the directory sectors and so forth. The Mac has a different format, but Mac disks cannot be read directly by the ST, because Apple developed (for some unknown reason) a 'variable speed' disk drive for the Macintosh. For these reasons, a special "Magic" format is needed for your Sac disks. All the utilities to format and copy these disks (single or double sided) are provided. The Magic program itself allows you to pick the Mac RAM size you want, parallel or serial printer port, and harddrive partitions. (Although a harddrive is not presently supported, it may well be, by the time that you read this, and preliminary reports from Dave Small have it as being faster than a Mac SE!)

The Sac also runs Mac software about 20% faster than a regular Macintosh...

The emulator itself is a Macintosh! There appears to be absolutely no difference between the Mac, and what you see on your ST screen. Wellllll, some difference...you'll have some screen space "left over", since the Mac doesn't have the same high resolution (total number of pixels, actually) as the ST! Some concessions have to be made though - the ST doesn't have (or need) the same type of disk drive as the Mac where the disk is spit (literally!) out of the drive at you. The function keys are used for disk ejection and you must go through this procedure or risk damaging the data on the disk (ala the Mac!). There are some keyboard differences, but these are explained in the manual. "Finder", the operating overlay (similar to GEM), is just what you would see on a Mac. I won't go into the gory details here, regarding how Finder works, but with few exceptions, it is very close to GEM in file transfers, manipulation, access and so on. The Sac also runs Mac software about 20% faster than a regular Macintosh, a factor that's great for applications, but hell on arcade games! For those Magic Sac owners who are serious about learning the details of the Mac O/S, I seriously recommend that they buy a book for novice Mac owners, and there are too many available for me to list here.

Now for the negatives:

Because of the strange way the Mac drives work, the ST (as stated previously) cannot read Mac disks directly. This limits that Mac software which is usable on the ST, to non-copy-protected programs. It's also rather difficult to get non-protected commercial programs over to the ST, unless you buy them and somehow hook up a Mac to do the transfer (a cable and a Mac-format disk with a transfer program ARE included with the Magic Sac!). Even then, about 10% of Mac software still won't run on the Magic Sac, due to illegal calls to the O/S, *BY THE PROGRAMS*. Sac software updates are always being made by the author (vers. 4.5 should be available by the time that you read this) and more software continues to run with each update. As a side

(continued...)

The Magic Sac *(continued...)*

note, Data Pacific is reportedly quite close to production runs of the "**Translator**" (working name, at the moment), a device which would connect in-line between your ST's disk drives, and your ST. This would then allow for the automatic recognition, by the Translator, of Sac disks, or protected Mac disks!

The Sac also HATES the MIDI! I've often crashed (rolled?) out of the Sac because I've left my MIDI synth on. I ordered the **Epstart** Epson printer drivers from Data Pacific, but my copy would not boot, and they are reordered, so at the moment I cannot comment on the printer output while using the Sac. On the subject of peripherals, I must say that the Sac has performed flawlessly in concert with my modem, using public domain telecommunications packages (Note: *Red Ryder*, a Macintosh favorite, presently doesn't work with the Sac, although as of this writing, it appears likely that version 7.0 *may*). There is, at the moment, no sound support for the Mac within the emulation, nor does it appear likely at any future time, based on the fact that MIDI software on the Mac has tended to make multiple hardware calls. Considering that most MIDI software now appears to be favoring the Atari, this is probably of little significance!

The final question...

Is the Magic Sac something you need to buy? Well, the only person to answer that is you. It certainly is not necessary, as the ST has enough terrific software without the Macintosh library, but, there ARE a lot of nice Mac programs, nevertheless. If you have one or more of these Macintosh programs in mind, you may be able to justify this purchase. You should, however, attempt to be certain that your particular program(s) WILL run under the present emulation. To get a Macintosh computer for under $200, essentially, was a deal that I couldn't pass up, but if you are using your ST mainly for one or two specific tasks (and not a crazy hobbiest like me!) you can get along without it. If you have a color monitor, and have no intention of getting a monochrome monitor, then you may be best off passing up the Sac. Regardless of your choice, the Magic Sac is and will continue to be an interesting (and fun!) addition to the ST's library!

❑

Review:

ARTICFOX

by Electronic Arts

The translation of the Electronic Arts game, Articfox, has finally been done for the Atari ST - What *is* Articfox? Plain and simple, it is a first- person tank simulation game, set in the Artic, against almost impossible odds; it is "*Battle- zone*", with color and more.

The Articfox is a Slye-Hicks Mx-100 supertank equipped with a 150mm cannon, 2 mine dispensers, and guided missles. The story line goes like this:

An alien task force has been discovered in Antartica and is proceeding to take over the Earth by changing the atmosphere into something more suitable for the aliens, than for us. The only way of stopping this is to send in a single combat vehicle, which of course is the Articfox. This is a 1-man vehicle, and you are in charge. The mission is to get by the defenses, which consist of light and heavy tanks, recon sleds, fighters, recon flyers, and a few other assorted items, and to destroy the main fort. It doesn't sound easy, and it's not. There are 3 levels: "Training", "Beginner", and "Tournament". Each level, of course, is harder then the last, and in the training level, you can set up special options such as an indestructible Articfox, Turbo speed, and more.

The GOOD points

Since moving to the ST, from the 8-bit machines, I've come to expect excellent graphics from my ST and Articfox delivers on this. The targets, while not detailed, are nicely done. The scrolling, once the Articfox moves, is also very good. The battlefield was done fairly well, having mountains to move around, hills to move over, and crevices to avoid falling in, and this gives the game more strategy than just flying around an open area, blasting everything in sight.

The BAD points

The lack of the onscreen hands, as in the Amiga version, was a negative for me. Once I got used to this, it didn't matter, but here, the issue is that if the Amiga version has it, then I feel that the ST should have it also.

The only other flaw to this game is the lack of sound when in motion. I feel that the tank is the most impressive piece of hardware created for battle, and the sound of the tracks alone can give infantry troops the shivers! This point seems to have eluded the authors, since *there is no tank track sound.*

Summary

If you like this type of game, then by all means buy it. For me personally, while the flaws were significant, considering the power of the ST, they did not take away from the fun. This is a good product from EA. Now - ***where is MARBLE MADNESS?***

❑

- Reviewed by Charlie Chance

Review:

Sub Battle

Epyx Software
600 Galveston Dr.
Redwood City, CA
94063

by Ron M. Aryel

I am an avid simulator fan. When SubLogic's FLIGHT SIMULATOR II was released for the ST, I was overjoyed that at last my ST would accomodate the armchair flier in me. I am also a board wargamer, and as I often lack opponents, I look longingly at the shelves of computer stores, waiting for a good battle simulator to appear. Simulators are appearing, albeit slowly. Good ones are rare indeed.

I know something about submarines. I read Norman Polmar's work regularly. I look at the Naval Academy PROCEEDINGS. I've read Tom Clancy's THE HUNT FOR RED OCTOBER. I've been to the naval training center in San Diego and gone aboard a Sturgeon-class nuclear attack sub. I've always wondered what it would really be like to skipper a submarine on the prowl. My first experience was with Microprose's SILENT SERVICE, which was unsatisfying; next I tried Epyx's SUB BATTLE. I'm afraid things are getting worse. Both the company's simulation and its customer service leave much to be desired.

Obtaining SUB BATTLE (Epyx Software, 600 Galveston Drive, Redwood City, CA 94063) was a battle in itself. I sent the company a check for their advertised preview disk; I received nothing. Three long-distance phone calls later, I was told that my order would be researched and I would receive a return call. I received neither the disk nor the call. I wrote again, and after receiving no reply, called again. Finally, their representative, Mitzi McGilvray, admitted that the preview disk was not available, *but the product was!* This kind of unprofessional and discourteous treatment will deter me from buying anything else from Epyx. What if I had purchased a $200 programming language requiring some technical assistance after delivery?

SUB BATTLE (yes, it finally arrived) comes in an eye-catching box, and includes a manual and reference card in addition to the diskette. It offers the player a chance to command a German or American submarine during World War Two, during a variety of historically-based missions. A training scenario and complete war patrol for the stout-hearted are also included.

The box art looks great - and that is where the attraction ends. SUB BATTLE, like its predecessor SILENT SERVICE, suffers from inferior graphics, poor response to those commands, awkward keyboard arrangements and a paucity of targets on many missions. Moreover, unlike SILENT SERVICE, whose submarine felt a little more like an actual undersea vessel, SUB BATTLE's boats are more difficult to handle, with weapons that are not always correctly modelled.

To load the game, I had to turn the computer on, then open the program's file from the GEM-based menu. On loading, a nicely-drawn picture came on the screen, followed by an ad for another Epyx product and finally a submarine's control panel. SILENT SERVICE and SUB BATTLE are similar in their philosophy about graphics: they boast good static displays (title pictures, dials, switches etc.). The maps on SUB BATTLE are impressive. Yet, when looking through the periscope or bin- oculars, I always feel as though I am still using a Commodore 64 instead of an Atari ST when these programs are loaded. During one of my game sessions SUB BATTLE returned a message in the dialog box "Lookouts report smoke at 257 degrees, Sir." Well, I swung around to look in that direction - and saw nothing at all. When I do spot enemy vessels they have reasonable profiles, but move in a very jerky fashion and do not increase their size smoothly - something FLIGHT SIMULATOR mastered a long time ago. This would not be such a problem if the instruments and displays were easier to use. On the plus side, though, the target book is nicely done, with multiple views of each target vessel available for review.

In SILENT SERVICE, one needed only to point the periscope at a target and complete information would be listed as long as the vessel remained in the scope's viewfinder. In SUB BATTLE, one needs to place the mouse's arrow on a particular spot (never obvious) on the vessel and click once to center the view and display the information. The trouble is that the vessel moves slightly and this information is lost - so instead of firing weapons or transferring torpedoes I must keep clicking the mouse at the target to obtain a range and course update. The periscope turret traverses very slowly and when I approach closer to the target I simply cannot swivel around or maneuver fast enough. The computer takes a long time to acknowledge certain commands, longer than even a real submarine should take - something which can prove fatal in an encounter with escorts whose reflexes are light years faster than mine. To make matters worse, SUB BATTLE lacks an autorepeat feature. For example, one scenario in SILENT SERVICE pits a *kaibokan*, a light escort, one on one against the submarine - an easy kill for me. My usual tactic is to go head-on against it at long range and pump

(continued...)

Sub Battle (continued...)

shell after shell into it until it sinks, my deck gun outreaching its deck gun. SUB BATTLE fixed that by giving me a slow traverse and a gun that cannot hit anything - the escort then runs rings around me, and sends me to the bottom before I get a single shot off.

In order to prepare to fire on a target, one uses radar and sonar to find it first. On my training mission, my damaged submarine ran into an escort close to Pearl Harbor. It was within radar range, yet several sweeps on my scope showed nothing. It approached at high speed, and its first two shots disabled my deck gun, forward torpedo tubes and battery - oh well, next game.

The weapons themselves leave much to be desired. The manual provides a summary of the different kinds of torpedoes available to German and American skippers during the war - but neither it nor the simulator's displays indicate whether my submarine was carrying steam or electric torpedoes - something SILENT SERVICE did thoughtfully provide. The torpedoes themselves had operational ranges far below the stated ranges in the manual, and the deck gun often missed at ranges when I fully expected to hit a target. There was no provision for leading the target.

Once in combat, I found that I had few options other than abandon ship if escorts found me. SUB BATTLE provides the German player with a "bubble release" mechanism; I could not order the release of oil and debris, a common wartime tactic and usually effective against inexperienced escort captains. The game has an SOS provision. During one mission, an escort's attacks severely damaged my torpedo tubes, batteries, pressure hull and deck gun. My speed was cut to a maximum of four knots surfaced. The pull-down menu did not allow activation of an SOS message, and the CNTL-E keyboard command did not work, either.

As for miscellaneous items: Every simulator has some quirk in it, but these interfere with the game. During most SILENT SERVICE missions I never closed with the enemy because I was too busy experiencing midsea collisions with vessels I never saw (one would expect the Pacific Ocean to offer more space than an outsized bathtub). In SUB BATTLE I ran aground a little too often, and no provision is made to regularly take depth soundings. These problems happen most often in "Time Compression" mode, which is supposed to reduce the tedium involved in transiting the ocean to a combat area.

Time compression can be useful if enough modes are available. "1 sec = 1 sec" can be changed to a five-second, thirty-second, ten-minute, or four-hour mode. The last one is nice to get you into the combat area. Once there, I really needed a one-hour or 30-minute mode to allow for effective tracking of the targets (it is easy to let a convoy slip right past, if one is not positioned perfectly, prior to switching from four-hour to ten- or five-second modes). Further, I would have made this feature easier to use by making the submarine immune to shallow water and other problems while in the "four-hour" compressed mode. While not very realistic, such a change would improve this game's playability.

When I finally arrived on station during an American 1944 scenario, two convoys appeared very early; one was much too far away to intercept, and the other just managed to squeeze into port before I went to battle stations, submerged with only my periscope showing. I waited off the Japanese coast for 14 days, and used the time compression feature to speed the entry of the next convoy - trouble is, there was none. I returned to base empty-handed. I concede that real wartime patrols sometimes went for weeks without a sighting, but this is a simulation, and should offer the player a little more activity, even at the cost of historical accuracy.

Other undesirable aspects include a keyboard arrangement which made little sense helped make this game difficult to enjoy, (this is one area where a look at SubLogic's products would have been instructive, as the keypad controls are very intelligently and efficiently designed), coarse mouse controls which ignored keyclicks as often as they acknowledged them and a radio whose slow Morse Code is cute the first time and irritating the rest of the time (thankfully, the message speed can be increased). The keyboard's disorganization is a particularly sore point with me, because it could have provided an alternative to the mouse.

Good battle simulations are tough to design and code. Epyx has a product with much potential in SUB BATTLE, but has not seen fit to apply enough effort to produce a product worthy of the ST. One can compare it to a student who writes a fascinating thesis paragraph and neglects the rest of his essay. Anyone as eager to play a good submarine simulator as I am ought to close the checkbook and go back to FLIGHT SIMULATOR while we wait for the next program. SUB BATTLE is not worth wasting any money on.

❑

- Reviewed by Ron M. Aryel -

Ron Aryel is a college student, from Los Angeles, California.

The Rumor Mill...

Well, two months have gone by, and what have they brought us? Anybody out there got a Mega, as yet? - yes...and no.

If you're in Europe, then you might have had the opportunity to buy one. At least, if you're in Switzerland...'course, Canada got in 50 of 'em here a while back. So far, none of those have had blitters, but that's no surprise, right?

As I mentioned here last time, this has been a major hang-up in shipment, since the production yield was far too low. Being gun-shy, Atari's not willing to take on the TOS-in-ROM situation again, at least in the U.S. Ho-hum.

To add fuel to the fire, Marketing has been tusselling with the sales and distribution problems for the Megas. Seems that nobody told 'em that they would have to deal with this, I suppose. Announce the product in January, allow a trickle of shipment to surface in July/August, and *then* sit down and try to decide how best to sell them. Right.

At any rate, the latest brainstorm puts them into the "serious" category, aiming for "business customers", whatever that means. As a result, it will now probably require that a stocking dealer have an "outside sales force", in order to qualify! Hmmm...so much for the "mom 'n pop" dealers, I suppose...maybe *they* can be content with 520s and 1040s? Of course, VARs (Value-Added Resellers) can also qualify... sort of your "Vacuum-cleaner-salesman-cum-Atari Mega"? Welp, we *did* maintain that we Atarians wanted to be taken seriously, yes? This should convince 'em!

Speaking of serious...have you heard the "official" prices for the Megas, as yet? If you haven't, and had previously heard the "guesstimates" from Neil Harris, then you'd best sit down...seems that he was off...appreciably! A monochrome Mega2 will sell for something like $1699, with $200 more for RGB. The Mega4 will come in at about $2599, RGB. That's roughly $1000 more than the oft-bandied-about prices (but make note that they were never announced nor confirmed by Atari). Lots of shocked looks accompanied this announcement, but in retrospect, it seems less surprising, given the lower dollar value on the inter- national market. Besides, given the original proclamation of a DTP system for "under $3000", that still allows the laser to sell for $1299 or so. When these prices (which are suggested *list*) are discounted 10%-15%, all will not look quite so bad, I suspect. If you don't have a *need* for this machine's capabilities, you may have to "settle" for the 520 or 1040, but there are worse things in life, I think!

Speaking of new machines, the laser is still in limbo. The TEC-engined version, for sale only in Europe, was recently reviewed by a British magazine, and try though they might to be favorable towards it, they panned it rather badly, it seems. While a different brand of engine is to be used here, it seems plausible that there are some serious head-scratching sessions going on over this one. Not only do they have to face an increasingly competitive marketplace (those other low-priced lasers work with many more brands of computers!), but they STILL can't decide how to "talk" to the thing!

PostScript vs. GDOS...

Seems that two of the Tramiels now (still) favor PostScript for the more serious work (hooray!), while one (same as last issue) is insistent on GDOS, whether it's an "industry standard" or not! It's not clear whether he simply finds the licensing fees for PostScript to be offensive, or if it's his devotion to a code that he has personally grown involved with, but the argument continues. If it were only on this basis, I'd begin to doubt his decision-making ability, but almost simultaneously, I find that he's also opposed to something else, and this one makes sense!

The PCs...

Remember them? Yup. This same individual is now understood to be firmly *AGAINST* them! What? Six months after announcement, and we can't even resolve what products we're going to release? (And you thought that you had problems?) Frankly, I have to agree that they should not have been brought out, but that was settled 6 months ago, I thought! Today, given the announcements to the international news media, I'd say that they're pretty firmly committed, if they expect to have *ANY* credibility left by year's end.

If you were to ask about the hardware emulator (PC) that Atari has alluded to for so long, it's still thought to be "possible", but probably growing more doubtful by the minute.

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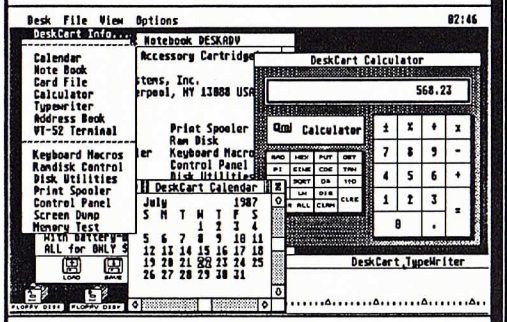

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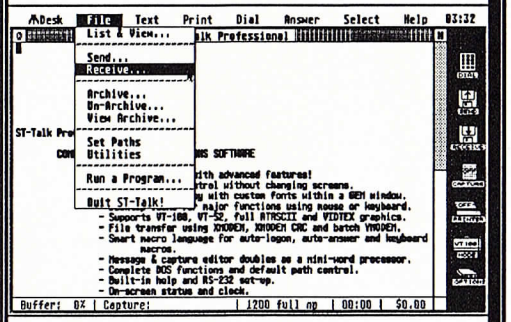

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